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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

TOBIAS DASSLER ET AL.

Group Art Unit: Unknown

Examiner: Unknown

Serial No.: 10/564,868

Filed: January 17, 2006

For: CELLS AND METHOD FOR FERMENTATIVE PREPARING OF R-α-LIPOIC ACID

Attorney Docket No.: WAS 0758 PUSA

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. § 1.97(b)

Mail Stop Amendment
Commissioner for Patents
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and §§ 1.97-1.98, the references listed and identified on the attached Forms PTO/SB08A and/or SB08B are being submitted herewith for consideration by the Examiner. This statement is being filed in accordance with 37 C.F.R. § 1.97(b).

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8 (FIRST CLASS MAIL)

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on:

2-23-06 — Date of Deposit

James W. Proscia — Name of Person Signing

Signature

While this Statement is being filed in compliance with the duty of disclosure, citation of the listed references is not to be construed as an admission that any of the references are "material" as defined under 37 C.F.R. § 1.56(b).

Accompanying the Information Disclosure Statement is the statement of Dr. Holger Potten describing the content of the references cited in the Information Disclosure Statement.

No copies of the listed U.S. patent references or the listed U.S. patent application publication references have been included herewith pursuant to 37 C.F.R. § 1.98(a)(2). All other references have been provided as required. Consideration and entry into the record of the listed references is respectfully requested.

Respectfully submitted,

TOBIAS DASSLER ET AL.

By: _____

James W. Proscia
Reg. No. 47,010
Attorney for Applicant

Date: 2/23/06

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PTO/SB/08A (10-96) [MODIFIED]
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for Form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet	1	of	1

Complete if Known	
Application Number	10/564,868
Filing Date	January 17, 2006
First Named Inventor	Tobias Dassler et al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	WAS 0758 PUSA

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. PATENT DOCUMENT Number	Kind Code[2] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (*if known*)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
		DE	36 29 116 A1		Asta Pharma AG	03-10-1988		
		DE	41 37 773 A1		Degussa AG	05-19-1993		
		DE	195 33 881 A1		Arzneimittelwark	03-20-1997		
		DE	100 36 516 A1		Asta Medica AG	02-07-2002		
		DE	100 56 025 A1		Asta Medica AG	02-07-2002		
		DE	102 35 270 A1		Consortium für	02-12-2004		
		DE	102 45 993 A1		Consortium für	05-06-2004		
		DE	102 58 127 A1		Consortium für	07-08-2004		
		WO	2004/044211 A1		Consortium für	05-27-2004		
		WO	2004/053131 A		Consortium für	06-24-2004		

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] See attached Kinds of U.S. Patent Documents. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

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Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	WAS 0758 PUSA

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
		Derwent Abstract Corresponding to DE 36 29 116 A1.	
		Derwent Abstract Corresponding to DE 41 37 773 A1.	
		Derwent Abstract Corresponding to DE 195 33 881 A1.	
		Derwent Abstract Corresponding to DE 100 36 516 A1.	
		Derwent Abstract Corresponding to DE 100 56 025 A1.	
		Derwent Abstract Corresponding to DE 102 35 270 A1.	
		Derwent Abstract Corresponding to DE 102 45 993 A1.	
		Derwent Abstract Corresponding to DE 102 58 127 A1.	
		MORRIS ET AL., "Lipoic Acid Metabolism in *Escherichia coli*: the *lplA* and *lipB* Genes Define Redundant Pathways for Ligation of Lipoyl Groups to Apoprotein", Journal of Bacteriology, Vol. 177, No. 1, January 1995, Pages 1-10.	
		MILLER ET AL., "*Escherichia coli* LipA Is a Lipoyl Synthase: In Vitro Biosynthesis of Lipoylated Pyruvate Dehydrogenase Complex from Octanoyl-Acyl Carrier Protein", Biochemistry 2000, Vol. 39, Pages 15166-15178.	
		WALTON ET AL., "The Synthesis of (+)-α-Lipoic Acid and Its Optical Antipode", J. Amer. Chem. Soc., Vol. 76, 1954, Page 4748.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

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		YADAV ET AL., "Synthesis of α-lipoic acid-A highly useful biologically active compound", Journal of Scientific & Industrial Research, Vol. 49, August 1990, Pages 400-409.	
		DASARADHI ET AL., "A Novel Enatiospecific Synthesis of (S)-(-)-Methyl 6,8-Dihydroxyoctanoate, a Precursor of (R)-(+)-α-Lipoic Acid", J. Chem. Soc., Chem. Commun., 1990, Pages 729-730.	
		RAMA RAO ET AL., "Synthesis of (3R, 4R)-1,5-Hexadien-3,4-Diol And Its Unsymmetrical Derivatives: Application to (R)-(+)-α-Lipoic Acid", Tetrahedron Letters, Vol. 28, No. 19, 1987, Pages 2183-2186.	
		HAMILTON ET AL., "New Method for Generating Deletions and Gene Replacements in *Escherichia coli*", Journal of Bacteriology, Vol. 171, No. 9, September 1989, Pages 4617-4622.	
		HERBERT ET AL., "Turbidimetric and Polarographic Assays for Lipoic Acid using Mutants of *Escherichia coli*", Methods Enzymol. 18A, 1970, Pages 269-272.	
		HERBERT ET AL., "Lipoic Acid Content of *Escherichia coli* and Other Microorganisms", Arch. Microbiol. 106, 1975, Pages 259-266.	
		MARKRIDES ET AL., "Strategies for Achieving High-Level Expression of Genes in *Escherichia coli*", Microbiological Reviews, Vol 60, No. 3, September 1996, Pages 512-538.	
		GOPALAN ET AL., "Sterochemical Control of Yeast Reductions: Synthesis of R-(+)-α-Lipoic Acid", Tetrahedron Letters, Vol. 30, No. 42, 1989, Pages 5705-5708.	
		CHANG ET AL., "Construction and Characterization of Amplifiable Multicopy DNA Cloning Vehicles Derived from the P15A Cryptic Miniplasmid", Journal of Bacteriology, Vol. 134, No. 3, June 1978, Pages 1141-1156.	

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Complete if Known	
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First Named Inventor	Tobias Dassler et al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	WAS 0758 PUSA

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		ALI ET AL., "Isolation and characterization of lipoylated and unlipoylated domains of the E2p subunit of the pyruvate dehydrogenase complex of *Escherichia coli*", Biochem. J. Vol. 271, 1990, Pages 139-145.	
		BROOKES ET AL., "Syntheses of α-(R)-and α-(S)-Lipoic Acid from (S)-Malic Acid", J. Chem. Soc. Perkin Trans. 1, 1988, Pages 9-12.	
		PACKMAN ET AL., "Lipoylation of the E2 components of the 2-oxo acid dehydrogenase multienzyme complexes of *Escherichia coli*", Biochem. J. Vol. 277, 1991, Pages 153-158.	
		MILES ET AL., "Subgenes expressing single lipoyl domains of the pyruvate dehydrogenase complex of *Escherichia coli*", Biochem. J., Vol. 245, 1987, Pages 869-874.	
		BRINGMANN ET AL., "A Short and Productive Synthesis of (R)-α-Lipoic Acid", Z. Naturforsch., 54b, 1999, Pages 655-661.	
		RECHE ET AL., "Structure and selectivity in post-translational modification: attaching the biotinyl-lysine and lipoyl-lysine swinging arms in multifunctional enzymes", The EMBO Journal, Vol. 18, No. 10, 1999, Pages 2673-2682.	
		REED ET AL., "Lipoic Acid Metabolism in *Escherichia coli*: Sequencing and Functional Characterization of the *lipA* and *LipB* Genes", Journal of Bacteriology, Vol. 175, No. 5, March, 1993, Pages 1325-1336.	
		VAISVILA ET AL., "The LipB protein is a negative regulator of *dam* gene expression in *Escherichia coli*", Biochimica et Biophysica Acta 1494, 2000, Pages 43-53.	
		JORDAN ET AL., "The *Escherichia coli lipB* Gene Encodes Lipoyl (Octanoyl)-Acyl Carrier Protein:Protein Transferase", Journal of Bacteriology, Vol., 185, No. 5, March 2003, Pages 1582-1589	
		JORDAN ET AL., "Chromosomal Amplification of the *Escherichia coli lipB* Region Confers High-Level Resistance to Selenolipoic Acid", Journal of Bacteriology, Vol. 184, No. 19, October 2002, Pages 5495-5501.	

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re application of	:	
DASSLER ET AL.	:	
Serial Number	:	Group Art Unit:
Filed:	:	
For:	:	

CELLS AND METHOD FOR THE FERMENTATIVE PRODUCTION OF R-α-LIPOIC ACID

Information Disclosure Statement

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir or Madam:

I, Holger Potten, associated with the preparation and prosecution of the above-identified application, residing at Neubiberger Straße 17a, 81737 München, Germany, wish to call the attention of the Patent Examiner to the references enumerated on the enclosed PTO Form-1449.

I believe the documents enumerated on the enclosed Form PTO-1449 and attached thereto, are cited in the enclosed International Search Report as well as in the application and may be material to the examination of the application.

Therefore, it is respectfully requested that the foregoing Information Disclosure Statement be considered by the Examiner and incorporated into the file of this application.

I wish to comment as follows concerning the prior art references enumerated on PTO Form-1449:

DE 100 36 516 A1, cited in the application, a Derwent abstract in English language is enclosed.

DE 195 33 881 A1, cited in the application, a Derwent abstract in English language is enclosed.

DE 36 29 116 A1, cited in the application, a Derwent abstract in English language is enclosed.

DE 41 37 773 A1, cited in the application, a Derwent abstract in English language is enclosed.

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DE 102 45 993 A1, cited in the application, a Derwent abstract in English language is enclosed.

DE 102 58 127 A1, cited in the application, a Derwent abstract in English language is enclosed.

WO 2004/044211 A1, cited in the European Search Report, the abstract in English language is included (point (57), front page).

WO 2004/053131 A1, cited in the European Search Report, the abstract in English language is included (point (57), front page).

MORRIS ET AL.: "Lipoic Acid Metabolism in Escherichia coli: the lplA and lipB Genes Define Redundant Pathways for Ligation of Lipoyl Groups to Apoprotein", Journal of Bacteriology, Vol. 177, No. 1, January 1995, Pages 1 – 10, cited in the International Search Report, is already in English language.

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HAMILTON ET AL.: "New Method for Generating Deletions and Gene Replacements in Escherichia coli", Journal of Bacteriology, Vol. 171, No. 9, September 1989, Pages 4617 – 4622, cited in the application, is already in English language.

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Signed this 17th day of January, 2006.

.....
Dr. Holger Potten